

## Claims

1. A device for automatically compensating for the imbalance of the rotor (4, 5) of a centrifuge with a compensating ring (8), which can be supported concentrically in the resting position over an elastic bearing device at a concentric surface of the rotor, wherein the bearing device is constructed as an elastic ring (9,19), which yields at least radially.

2. The device of claim 1 with a rotor (4, 5) having a drive shaft (4), wherein the device (8, 9) is constructed to be mounted on the outer surface of the shaft (4).

3. The device of claim 1 with a rotor (4, 5) having a drive shaft (4), wherein the device (8, 9) is constructed to be mounted on the inner surface of the shaft (4).

4. The device of claim 1, wherein the elastic ring is constructed as an elastomeric ring (9).

5. The device of claim 4, wherein the elastomeric ring is constructed of several layers (9', 9'') with different elastomeric properties.

6. The device of claim 1, wherein a seating ring (11), constructed for being mounted on the surface of the rotor, is provided on the side of the elastic ring (9, 19) lying on the surface of the rotor (4, 5).

7. The device of claim 1, wherein the parts (8, 9, 11; 8, 19, 11) of the device are permanently connected with one another.

8. The device of claim 4, wherein the elastomeric ring (9; 9', 9'') consists at least partially of an elastomeric foam.

9. The device of claim 1, wherein the elastic ring is constructed as an annular helical spring (19) with convolutions extending obliquely to the radial direction.